Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-40 (canceled)

41. (currently amended) A method of therapeutically treating a patient suffering from Parkinson's disease, the method comprising

administering to the patient an effective regime of an agent that induces an immunogenic response against $A\beta$ in the patient and thereby therapeutically treating the disease[[,];

wherein the agent is $A\beta$ or an immunogenic fragment thereof, or is an antibody to $A\beta$.

- 42. (previously presented) The method of claim 41, wherein the agent is $A\beta$ or an immunogenic fragment thereof.
- 43. (previously presented) The method of claim 41, wherein the agent is an antibody to $A\beta$.
- 44. (currently amended) A method of therapeutically treating a patient suffering from Parkinson's disease, comprising

administering to the patient an effective regime of an agent that induces an immunogenic response against alpha-synuclein and an agent that induces an immunogenic response against $A\beta$ in the patient and thereby therapeutically treating the disease[[:]];

wherein the agent that induces an immunogenic response against alpha-synuclein is alpha synuclein or an immunogenic fragment thereof or an antibody to alpha synuclein, and the agent that induces an immunogenic response against $A\beta$ is $A\beta$ or an immunogenic fragment thereof, or an antibody to $A\beta$.

- 45. (previously presented) The method of claim 41, wherein the agent is administered peripherally.
- 46. (previously presented) The method of claim 41, wherein the effective regime comprises administering multiple dosages over a period of at least six months.
 - 47. (canceled)
- 48. (previously presented) The method of claim 41, wherein the patient has a risk factor for the disease.
 - 49. (canceled)
 - 50. (canceled)
- 51. (currently amended) The method of claim [[50]] <u>41</u>, wherein the administering results in improvement in a sign or symptom of Parkinson's disease.
- 52. (currently amended) The method of claim [[50]] <u>41</u>, wherein the administering improves motor characteristics of the patient.
- 53. (previously presented) The method of claim 41, further comprising monitoring a sign or symptom of Parkinson's disease in the patient.
- 54. (previously presented) The method of claim 41, wherein the patient is free of Alzheimer's disease.
- 55. (previously presented) The method of claim 54, wherein the patient is free of Alzheimer's disease and has no risk factors thereof.

56-70 (canceled)

71. (currently amended) A method of prophylactically treating a patient having a known genetic risk of Parkinson's disease, the method comprising

administering to the patient an effective regime of an agent that induces an immunogenic response against $A\beta$ in the patient and thereby effecting prophylaxis of the disease; wherein the agent is $A\beta$ or an immunogenic fragment thereof, or is an antibody to $A\beta$.

- 72. (previously presented) The method of claim 71, wherein the agent is $A\beta$ or an immunogenic fragment thereof.
- 73. (previously presented) The method of claim 71, wherein the agent is an antibody to $A\beta$.
- 74. (currently amended) A method of prophylactically treating a patient having a known genetic risk of Parkinson's disease in the brain, comprising

administering to the patient an effective regime of an agent that induces an immunogenic response against alpha-synuclein and an agent that induces an immunogenic response against $A\beta$ in the patient and thereby effecting prophylaxis of the disease;

wherein the agent that induces an immunogenic response against alpha-synuclein is alpha synuclein or an immunogenic fragment thereof or an antibody to alpha synuclein, and the agent that induces an immunogenic response against $A\beta$ is $A\beta$ or an immunogenic fragment thereof, or an antibody to $A\beta$.

- 75. (previously presented) The method of claim 71, wherein the agent is administered peripherally.
- 76. (previously presented) The method of claim 71, wherein the effective regime comprises administering multiple dosages over a period of at least six months.

77-78. (canceled)

79. (previously presented) The method of claim 71, wherein the patient is free of Alzheimer's disease.

- 80. (previously presented) The method of claim 79, wherein the patient is free of Alzheimer's disease and has no risk factors thereof.
- 81. (previously presented) The method of claim 41, wherein the patient is free of clinical symptoms of a disease characterized by extracellular amyloid deposits.
- 82. (previously presented) The method of claim 45, wherein the patient is free of clinical symptoms of a disease characterized by extracellular amyloid deposits.
- 83. (previously presented) The method of claim 71, wherein the patient is free of clinical symptoms of a disease characterized by extracellular amyloid deposits.
- 84. (previously presented) The method of claim 74, wherein the patient is free of clinical symptoms of a disease characterized by extracellular amyloid deposits.